

**Include front page and acknowledgement, index page, source code, output, variable description, conclusion, etc. in your project before taking the print out.**

# SOURCE CODE





```
    return num1/num2;

}

double pow()

{

Scanner sc= new Scanner(System.in);

double pow=1.0d;

System.out.println("please enter the value of x");

double x = sc.nextInt();

System.out.println("please enter the value of n");

double n = sc.nextInt();

pow= Math.pow(x,n);

return pow;

}

long fact()

{

Scanner sc= new Scanner(System.in);

long fac=1;

System.out.println("enter the value of x");

long x = sc.nextLong();

for(int i=1;i<=x;i++)

{

    fac = fac*i;

}

return fac;

}
```

```
float reciprocal()
{
    Scanner sc= new Scanner(System.in);
    System.out.println("enter the value of x");
    float x= sc.nextFloat();
    return 1/x;
}

float sqr()
{
    Scanner sc= new Scanner(System.in);
    System.out.println("enter the value of x");
    float x= sc.nextFloat();
    float sq= (float)Math.sqrt(x);
    return sq;
}

float sqr_pow()
{
    Scanner sc= new Scanner(System.in);
    System.out.println("enter the value of x");
    float x= sc.nextFloat();
    return (x*x);
}

int ten()
```

```
{  
    Scanner sc= new Scanner(System.in);  
  
    System.out.println("enter the value of x");  
  
    int x= sc.nextInt();  
  
    int t=(int)Math.pow(10,x);  
  
    return t;  
}
```

```
float cube_root()  
{  
    Scanner sc= new Scanner(System.in);  
  
    System.out.println("enter the value of x");  
  
    float x= sc.nextFloat();  
  
    float cr= (float)Math.cbrt(x);  
  
    return cr;  
}
```

```
int cube()  
{  
    Scanner sc= new Scanner(System.in);  
  
    System.out.println("enter the value of x");  
  
    int x= sc.nextInt();  
  
    return (x*x*x);  
}
```

```
public double nthroot(int n, double x)
{
    return nthroot(n, x, .0001);
}

public double nthroot(int n, double x, double p)
{
    if(x < 0)
    {
        System.err.println("Negative!");
        return -1;
    }

    if(x == 0)
        return 0;

    double x1 = x;

    double x2 = x / n;

    while (Math.abs(x1 - x2) > p)
    {
        x1 = x2;
        x2 = ((n - 1.0) * x2 + x / Math.pow(x2, n - 1.0)) / n;
    }

    return x2;
}

double Sin()
{
    Scanner sc= new Scanner(System.in);
```

```
System.out.println("enter the angle in degree");

double x= sc.nextDouble();

double r = Math.toRadians(x);

double si= Math.sin(r);

return si;

}

double Cos()

{

Scanner sc= new Scanner(System.in);

System.out.println("enter the angle in degree");

double x= sc.nextDouble();

double r = Math.toRadians(x);

double co= Math.cos(r);

return co;

}

double Tan()

{

Scanner sc= new Scanner(System.in);

System.out.println("enter the angle in degree");

double x= sc.nextDouble();

double r = Math.toRadians(x);

double ta= Math.tan(r);

return ta;

}

double Cot()
```

```
{  
    Scanner sc= new Scanner(System.in);  
  
    System.out.println("enter the angle in degree");  
  
    double x= sc.nextDouble();  
  
    double r = Math.toRadians(x);  
  
    double cot= 1/Math.tan(r);  
  
    return cot;  
}  
  
double Sec()  
  
{  
    Scanner sc= new Scanner(System.in);  
  
    System.out.println("enter the angle in degree");  
  
    double x= sc.nextDouble();  
  
    double r = Math.toRadians(x);  
  
    double sec= 1/Math.cos(r);  
  
    return sec;  
}  
  
double Cosec()  
  
{  
    Scanner sc= new Scanner(System.in);  
  
    System.out.println("enter the angle in degree");  
  
    double x= sc.nextDouble();  
  
    double r = Math.toRadians(x);  
  
    double cosec= 1/Math.sin(r);  
  
    return cosec;  
}
```



```
if(choice ==1)
System.out.println("result :" +ob.add());
if(choice==2)
System.out.println("result :" +ob.sub());
if(choice==3)
System.out.println("result :" +ob.multi());
if(choice==4)
System.out.println("result :" +ob.div());
if(choice==5)
System.out.println("result :" +ob.pow());
if(choice==6)
System.out.println("result :" +ob.fact());
if(choice==7)
System.out.println("result :" +ob.reciprocal());
if(choice==8)
System.out.println("result :" +ob.sqr());
if(choice==9)
System.out.println("result :" +ob.sqr_pow());
if(choice==10)
System.out.println("result :" +ob.ten());
if(choice==11)
System.out.println("result :" +ob.cube_root());
if(choice==12)
System.out.println("result :" +ob.cube());
if(choice==13)
```

```
{  
    System.out.println("enter the value of n of which root is to be find");  
    int n= sc.nextInt();  
    System.out.println("enter the value of x");  
    int x= sc.nextInt();  
    System.out.println("result :" +ob.nthroot(x,n));  
}  
  
if(choice==14)  
    System.out.println("result :" +ob.Sin());  
  
if(choice==15)  
    System.out.println("result :" +ob.Cos());  
  
if(choice==16)  
    System.out.println("result :" +ob.Tan());  
  
if(choice==17)  
    System.out.println("result :" +ob.Cot());  
  
if(choice==18)  
    System.out.println("result :" +ob.Sec());  
  
if(choice==19)  
    System.out.println("result :" +ob.Cosec());  
  
if(choice==20)  
    System.out.println("result :" +ob.Log());  
  
}  
}
```



## OUTPUT



<u>NAME OF THE VARIABLE</u>	<u>DATA TYPE</u>	<u>USE</u>
1: sum	float	To store the sum of numbers
2: num	int	To store how many no. User want to do operation with
3: i	int	For conditional purpose
4: var	float	To store different numbers
5: sub	float	To store the result subtraction of different numbers
6: multi	float	To the result of multiplication of different numbers
7: div	float	Davison of two numbers
8: num1	float	To store first number
9: num2	float	To store second number
10: pow	double	To store the result of x to the power n
11: x		

# CONCLUSION

*Making a project is a good way to possess knowledge. And I want to thank my teacher for giving me an opportunity to work on this I am sure that the knowledge I gained from this project will help me further. I have tried my best to make this project easy and understandable, but still I apologize for any kind of discrepancies.*

**Thank you**

# BIBLOGRAPHY

*The contents of this program are taken from many sources. Some of those sources are :-*

- (1) *ISC BOARD 9<sup>th</sup> CLASS COMPUTER APPLICATIONS BOOK.*
- (2) *ISC BOARD 10<sup>th</sup> CLASS COMPUTER APPLICATIONS BOOK.*
- (3) *MANY INTERNET SITES.*
- (4) *MANY COMPUTER APPLICATIONS BOOKS.*

*To make this, we have taken help of our Computer teacher Mrs. Deepa Rani madam.*